

REMARKS

Claims 1-34 are pending. Claims 18, 27 and 33 have been amended. Reconsideration and allowance of the pending claims is respectfully requested.

35 U.S.C. § 102(e) Claim Rejections

Claims 1-34 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,742,015 to Bowman-Amuah (hereinafter "Bowman-Amuah"). The Applicant respectfully disagrees.

Claim 1 recites a server system having "one or more computers" and "an application executing on the computers to handle client requests", "the application comprising: a business logic layer to process the client requests according to a particular business domain and produce replies to be returned to the clients in response to the client requests" and "a presentation layer separate from, but in communication with, the business logic layer to structure the replies in a manner that makes the replies presentable on different types of client devices." Bowman-Amuah does not disclose, teach, or suggest these aspects.

Bowman-Amuah describes base services patterns in a netcentric environment. Although Bowman-Amuah describes "business logic" and "presentation logic", the presentation logic of Bowman-Amuah is limited to implementation on the client, as shown by the following excerpts:

At a minimum, a two-tiered client/server architecture assumes that an **application's presentation logic resides on the client** and its data management logic resides on the server. *See Bowman-Amuah, Col. 33, Lines 24-27 (emphasis added).*

Three-tiered architecture describes a distributed application architecture in which business applications are separated into three logical components: presentation and control,

1 application logic, and data management. These logical
2 components are "clean layered" such that each runs on a
3 different machine or platform, and communicates with the
other components via a network. *See Bowman-Amuah, Col.*
33, Lines 59-65.

4 As shown in the above excerpted portions, in each architecture described in
5 Bowman-Amuah, the execution of the presentation logic is performed on the
6 client. Accordingly, Bowman-Amuah does not disclose, teach or suggest
7 execution of the presentation logic on a server. Claim 1, however, recites a
8 "server system" having "one or more computers", and "an application executing
9 on the computers to handle client requests" having "a business logic layer to
10 process the client requests" and "a presentation layer separate from, but in
11 communication with, the business logic layer to structure the replies in a manner
12 that makes the replies presentable on different types of client devices."
13 Accordingly, for at least this reason, claim 1 is not anticipated by Bowman-Amuah
14 and therefore allowance of claim 1 is respectfully requested.

15 **Claims 2-11** are dependent claims which depend either directly or
16 indirectly from claim 1. Accordingly, these claims are allowable for at least this
17 reason. Additionally, these claims are also allowable for their own recited
18 features, which are not disclosed, taught or suggested by Bowman-Amuah. For
19 example, the portion of Bowman-Amuah referenced by the Office in the rejection
20 of Claim 5 recites "a NCC application can execute within a client that can run on
21 multiple operating system and hardware platforms". *See Bowman-Amuah, Col. 32,*
22 *Lines 51-53.* Neither this referenced portion, nor the other referenced portion cited
23 by the Office disclose, teach or suggest "wherein the different types of client
24 devices support different data formats, the presentation layer being configured to
25 select appropriate data formats for encoding the replies" as recited by Claim 5. As

1 before, the referenced portion of Bowman-Amuah is again limited to execution on
2 the client and does not disclose, teach or suggest execution on the server.

3 Likewise, Claim 6 recites “wherein the different types of client devices
4 support different communication protocols, the presentation layer being
5 configured to select appropriate communication protocols for delivering the
6 replies to the clients”, which is not disclosed, taught or suggest by Bowman-
7 Amuah. Rather, the portion referenced by the Office (e.g., Bowman-Amuah, Col.
8 37, Lines 54-63) merely recites the use of protocols to communicate with a
9 database, but does not disclose, teach or suggest the selection of appropriate
10 communication protocols by the presentation layer. Further, Claim 9 recites “a
11 request dispatcher to structure a reply for service back to a client device” which is
12 not disclosed, taught or suggest by Bowman-Amuah. Accordingly, allowance of
13 claims 2-11 is respectfully requested.

14 **Claim 12** recites “[i]n a server application that receives client requests for a
15 problem domain and has at least one problem solving module to generate replies
16 to be served back to clients, a presentation module separate from the problem
17 solving module” having “a presentation component to construct how a reply will
18 appear” and “a rendering component to configure how the reply is output on a
19 particular client” which is not disclosed, taught or suggested by Bowman-Amuah.

20 The Office asserts the following excerpts of Bowman-Amuah for disclosure
21 of the above recited features:

22 The Netcentric Architecture Framework identifies those run-
23 time services required when an application executes in a
24 Netcentric environment. As shown in FIG. 10, the services
25 can be broken down into logical areas: Presentation Services
1000, Information Services 1002,1004, Communication
Services 1006,1008, Communication Fabric Services 1010,

Transaction Services 1012,1014, Environment Services 1016,1018, Base Services 1020 and Business Logic 1022,1024. *See Bowman-Amuah, Col. 31, Lines 52-60.*

Presentation Services enable an application to manage the human-computer interface. This includes capturing user actions and generating resulting events, presenting data to the user, and assisting in the management of the dialog flow of processing. FIG. 13 illustrates several components of the Presentation area of the Netcentric Architecture Framework. *See Bowman-Amuah, Col. 34, Lines 62-67.*

Three-tiered architecture describes a distributed application architecture in which business applications are separated into three logical components: presentation and control, application logic, and data management. These logical components are "clean layered" such that each runs on a different machine or platform, and communicates with the other components via a network. *See Bowman-Amuah, Col. 33, Lines 59-65.*

However, as shown in the above excerpts and elsewhere in Bowman-Amuah, the presentation logic in Bowman-Amuah is executed on the client, an example of which is shown in corresponding FIG. 10 of Bowman-Amuah.

Thus, as stated above in relation to Claim 1, Bowman-Amuah limits execution of the presentation logic to the client. However, Claim 12 recites "a server application" having "a presentation component" and "a rendering component to configure how the reply is output on a particular client" which is not disclosed, taught or suggested by Bowman-Amuah. Accordingly, for at least these reasons, Claim 12 is not anticipated by Bowman-Amuah and withdrawal of the rejection is respectfully requested.

Claims 13-17 are dependent claims which depend either directly or indirectly from claim 12. Accordingly, these claims are allowable for at least this reason. Additionally, these claims are also allowable for their own recited

1 features, which are not disclosed, taught or suggested by Bowman-Amuah. For
2 example, Claim 16 recites “wherein the clients support different communication
3 protocols, the presentation component being configured to select an appropriate
4 communication protocol **for delivering the reply to the particular client.**”
5 (*emphasis added*). The presentation logic of Bowman-Amuah, however, is limited
6 to execution on the client. Accordingly, withdrawal of the rejections with respect
7 to Claims 13-17 is respectfully requested.

8 **Claim 18** has been amended, and as amended (portion of the amended
9 material appear in bold/italics below) recites a computer software architecture
10 embodied on one or more computer-readable media, comprising:

- 11 • a presentation tier to determine how data *for communication to a*
12 *client device* is to be presented on the client device; and
- 13 • a rendering tier, separate from the presentation tier, to determine
14 how to render the data on the client device.

15 Support for the amendment may be found throughout the specification and
16 drawings as filed. As previously described in relation to Claims 1 and 12,
17 Bowman-Amuah limits execution of the presentation logic on the client.
18 Accordingly, Claim 18 is allowable over Bowman-Amuah. Withdrawal of the
19 rejection is respectfully requested.

20 **Claims 19-23** are dependent claims which depend directly from claim 18.
21 Accordingly, these claims are allowable for at least this reason. Additionally,
22 these claims are also allowable for their own recited features, which are not
23 disclosed, taught or suggested by Bowman-Amuah. For example, Claim 22
24 recites “wherein the presentation tier comprises multiple dispatchers, each
25 dispatcher being configured to package the data according to a particular

1 communications protocol” which is not disclosed, taught or suggested by
2 Bowman-Amuah. Accordingly, withdrawal of the rejections with respect to
3 Claims 19-23 is respectfully requested.

4 **Claim 24** recites an architecture comprising “a tag library containing pre-
5 constructed tags for a variety of data formats”, “multiple request dispatchers to
6 structure replies to be returned to client devices in response to requests submitted
7 by the client devices, individual request dispatcher formatting data according to
8 particular formats that are supported by the client devices”, and “content renderer
9 to conform the replies to output capabilities of the client devices to which the
10 replies are to be returned”. Bowman-Amuah does not disclose, teach or suggest
11 these aspects. The Office references various sections of Bowman-Amuah (e.g.,
12 FIG. 10, Columns 249-250, and column 72, lines 20-25) for teaching the “multiple
13 request dispatchers” recited above. However, these sections merely describe
14 various standards, such as RTP. Claim 24, however, recites “multiple request
15 dispatchers” such that an “individual request dispatcher formatting data according
16 to particular formats that are supported by the client devices” which is not
17 disclosed, taught or suggest by Bowman-Amuah. Accordingly, Claim 24 is not
18 anticipated by Bowman-Amuah and withdrawal of the rejection is respectfully
19 requested.

20 **Claims 25-26** are dependent claims which depend directly from claim 24.
21 Accordingly, these claims are allowable for at least this reason. Additionally,
22 these claims are also allowable for their own recited features, which are not
23 disclosed, taught or suggested by Bowman-Amuah. For example, Claim 25
24 recites “wherein individual request dispatchers are further configured to select
25 communication protocols to be used to serve the replies back to the client devices”

1 which is not disclosed, taught or suggested by Bowman-Amuah. Accordingly,
2 withdrawal of the rejections with respect to Claims 25-26 is respectfully requested.

3 **Claim 27** has been amended, and as amended (portion of the amended
4 material appear in bold/italics below) recites a method comprising:

- 5 • receiving a reply generated by a server application in response to a
6 client request;
- 7 • structuring the reply to define how the reply will appear when
8 *communicated to and* presented at the client; and
- 9 • independent of said structuring, conforming the reply to output
10 capabilities of the client.

11 Support for the amendment may be found throughout the specification and
12 drawings as filed. As previously described in relation to Claims 1 and 12,
13 execution of the presentation logic in Bowman-Amuah is limited to being
14 performed on the client. Accordingly, Claim 27 is allowable over Bowman-
15 Amuah. Withdrawal of the rejection is respectfully requested.

16 **Claims 28-32** are dependent claims which depend directly from claim 27.
17 Accordingly, these claims are allowable for at least this reason. Additionally,
18 these claims are also allowable for their own recited features, which are not
19 disclosed, taught or suggested by Bowman-Amuah. For example, Claim 32
20 recites “wherein the configuring comprising sizing the reply for a display at the
21 client” which is not disclosed, taught or suggested by Bowman-Amuah.
22 Accordingly, withdrawal of the rejections with respect to Claims 28-32 is
23 respectfully requested.

1 **Claim 33** has been amended, and as amended (portion of the amended
2 material appear in bold/italics below) recites one or more computer-readable
3 media comprising computer-executable instructions that, when executed, direct an
4 application server to:


- 5 • generate replies in response to client requests, the client requests
6 being submitted by diverse client devices that support different data
7 formats and different communication protocols; and
- 8 • structure the replies to define how the replies will appear when
9 *communicated to and* presented on the client devices and
10 independently form individual replies for output capabilities of the
11 client devices so that the replies are encoded to comply with the data
12 formats supported by the client devices and are sent using the
13 communication protocols of the client devices.

14 Support for the amendment may be found throughout the specification and
15 drawings as filed. As previously described in relation to Claims 1 and 12,
16 Bowman-Amuah limits execution of the presentation logic on the client.
17 Accordingly, Claim 33 is allowable over Bowman-Amuah. Withdrawal of the
18 rejection is respectfully requested.

19 **Claim 34** is a dependent claim which depends directly from claim 33.
20 Accordingly, this claim is allowable for at least this reason. Additionally, this
21 claim is also allowable for its own recited features, which are not disclosed, taught
22 or suggested by Bowman-Amuah. Accordingly, withdrawal of the rejection with
23 respect to Claim 34 is respectfully requested.

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Respectfully Submitted,

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